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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,532	08/01/2001	John Canning	CU-2533 RJS	5910

7590

09/08/2003

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EXAMINER

WARREN, MATTHEW E

ART UNIT

PAPER NUMBER

2815

DATE MAILED: 09/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/831,532	Applicant(s) JOHN CANNING	
	Examiner Matthew E. Warren	Art Unit 2815	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the Amendment filed on June 20, 2003.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 3, 5, 7, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Amersfoort et al. (US 5,805,755).

In re claim 1, Amersfoort et al. shows (fig. 1) a laser system comprising at least one array of closely spaced diodes 12 arranged to emit radiant pump energy (col. 2, lines 33-45), and a plurality of waveguides 14 spaced adjacent the array, each waveguide being arranged to lase upon exposure to the radiant pump energy emitted from the diodes.

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In re claim 2, the waveguides lase at different frequencies (col. 7, lines 37-39).

In re claim 3, the system further comprises a coupler (16) for coupling laser outputs of individual ones of the waveguides to form a combined laser output.

In re claim 5, the plurality of waveguides comprise a series of optical fibers (col. 2, line 40).

In re claim 7, the waveguides form a multi-mode interference device (col. 1, lines 49-67).

In re claim 8, the waveguides are formed as part of a multimode waveguide structure which can be interconnected to a single mode waveguide (col. 1, lines 60-64).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amersfoort et al. (US 5,805,755) as applied to claim 1 above, and further in view of Scifres et al. (Re. 33, 722).

Amersfoort et al. does not show the reflection means as recited in claim 4 and the planar waveguide as recited in claim 6.

In re claim 4, Scifres et al. shows (fig. 16) a waveguide 111 for a laser system which further comprises a reflection means 127 spaced closely adjacent the

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waveguides and the array for reflecting the radiant pump energy emitted from the array back onto the waveguides. With this configuration the laser produces coherent light output (col. 9, lines 4-24)

In re claim 6, Scifres et al. shows (fig. 16) a laser system wherein the plurality of waveguides (103, 105, 107) comprise a series of planar waveguides for a specific stacking arrangement.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the waveguide of Amersfoort by placing a mirror at the end of the waveguide as taught by Scifres to produce a coherent light output.

Response to Arguments

Applicant's arguments filed with respect to claims 1-8 have been fully considered but they are not persuasive. The applicant primarily asserts that the prior art references do not show all of the elements of the claims. Specifically, the applicant contends that Amersfoort et al. does not teach "a plurality of waveguides...to lase upon exposure to radiant pump energy" because there is no disclosure toward the underlying inventive concept of "side pumping" as presented in Claim 1. The applicant also contends that Scifres et al. does not cure the deficiencies of Amersfoort because the mirror disclosed in Scifres is used for a purpose different from the applicant's. The examiner believes that the prior art references show all of the elements of the claims. Amersfoort is a proper reference because its filing date (1/17/1996) is before the filing date of the applicant's priority document. The applicant argues that Amersfoort does not disclose

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the underlying inventive concept of "side-pumping" however, none of the claims mention side-pumping. Therefore, Amersfoort is not required to teach or recite that limitation.

Claim 1 broadly recites diodes that emit radiant energy, and a plurality of waveguides that each lase upon exposure to the radiant energy. Those limitations are taught by Amersfoort as stated in the rejection above.

With respect to the argument that Scifres et al. does not cure the deficiencies of Amersfoort because the purpose is contrary to the applicant's use, the examiner contends the combined references show all the elements of the claims. Scifres states in column 9, lines 12-14, that "Portions of the light rays 129 diverging from fiber waveguides in bundle 111 is reflected by mirror 127 back into the bundle 111." With such a statement, Scifres clearly teaches the limitations in question. Although the purpose for using the mirror differs from the applicant's use, Scifres still teaches the use of the mirror and shows motivation for the combination. The cited references show all of the elements of the claims and proper motivation for the combination. For these reasons, the rejections above are still proper and this action is made final.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Warren whose telephone number is (703) 305-0760. The examiner can normally be reached on Mon-Thurs, and alternating Fri, 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on (703) 308-1690. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

MEW
MEW
September 3, 2003



ALLAN R. WILSON
PRIMARY EXAMINER